

PATENT COOPERATION TREATY

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PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PST 2165 PCT	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/SE00/00261	International filing date (day/month/year) 10.02.2000	Priority date (day/month/year) 24.02.1999
International Patent Classification (IPC) or national classification and IPC7 A 01 N 25/30, A 01 N 57/20, C 05 G 3/06		
Applicant Akzo Nobel nv et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of _____ sheets.
3. This report contains indications relating to the following items:
 - I Basis of the report
 - II Priority
 - III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV Lack of unity of invention
 - V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI Certain documents cited
 - VII Certain defects in the international application
 - VIII Certain observations on the international application

Date of submission of the demand 08.09.2000	Date of completion of this report 01.02.2001
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer Gerd Strandell/EÖ Telephone No. 08-782 25 00

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I. Basis of the report

1. With regard to the elements of the international application:^{*} the international application as originally filed the description:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

 the claims:

pages _____, as originally filed

pages _____, as amended (together with any statement) under article 19

pages _____, filed with the demand

pages _____, filed with the letter of _____

 the drawings:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

 the sequence listing part of the description:

pages _____, as originally filed

pages _____, filed with the demand

pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4. The amendments have resulted in the cancellation of: the description, pages _____ the claims, Nos. _____ the drawings, sheet/fig _____5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2 (c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

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V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	<u>1-18</u>	YES
	Claims	_____	NO
Inventive step (IS)	Claims	<u>1-18</u>	YES
	Claims	_____	NO
Industrial applicability (IA)	Claims	<u>1-18</u>	YES
	Claims	_____	NO

2. Citations and explanations (Rule 70.7)

The claimed invention relates to the use of a quaternary ammonium glycoside surfactant as an adjuvant for fertilisers or pesticides, such as herbicides. The surfactant contains at least one hydrocarbon group with 6-24 carbon atoms and at least one quaternary ammonium group where at least one substituent is an alkyleneoxy containing group which is connected to a saccharide residue by a glycosidic bond. Compositions containing these surfactants and pesticides or fertilisers are also described.

The following documents are cited:

- D1) Patent Abstracts of Japan, Vol 16, No 518, C-999 abstract of JP 4-193891 A (KAO CORP), 13 July 1992 (13.07.92)
- D2) JP 5043403 A (KAO CORP) 1993-02-23 (abstract) World Patents Index (online). London, U.K.: Derwent Publications, Ltd. (retrieved on 2000-05-22). Retrieved from: EPO WPI Database. DW9313, Accession no. 93-104146; & JP 5043403 (KAO CORP) 1993-06-29 (abstract). (online) (retrieved on 1999-08-27). Retrieved from: EPO PAJ Database
- D3) WO 9620203 A1 (ICI AUSTRALIA OPERATIONS PROPRIETARY LIMITED), 4 July 1996 (04.07.96), page 2, line 9 - line 24, claims 21,22,26-29
- D4) WO 9815181 A1 (ZENECA LIMITED), 16 April 1998 (16.04.98)
- D5) WO 9839273 A1 (RHODIA INC.), 11 Sept 1998 (11.09.98)

.../...

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: V

D6) EP 0498145 A1 (MONSANTO EUROPE S.A.),
12 August 1992 (12.08.92)

Document D1) discloses cationic sugar surfactants where the cationic part is connected to the sugar residue by a glycosidic bond.

Document D2) discloses surfactants containing sugar residues and nonionic, anionic or cationic groups. The ionic part of the molecules is connected to the sugar residue by an ether bond, which originates from a non-glycosidic hydroxyl substituent on the sugar. This means that the ionic group is not part of the glycosidic group that contains a large hydrocarbon residue. The surfactants are used in pesticide formulations.

Document D3) discloses alkyl polysaccharide derivatives useful inter alia as surfactants and/or adjuvants in agrochemical compositions.

Document D4) discloses compositions containing N-phosphonomethylglycine acid or a water-soluble salt thereof, an alkylglycoside surfactant and a quaternary ammonium salt surfactant.

Document D5) discloses a water-soluble, solid fertiliser composition comprising a water-soluble fertiliser and a surfactant system comprising a water-soluble, nonionic surfactant and an alkyl polyglycoside.

Document D6) discloses a solid phytoactive composition comprising N-phosphonomethylglycine in the form of a salt or the acid, an alkyl glycoside or alkyl polyglycoside and an agriculturally acceptable inorganic ammonium salt.

Thus, none of the cited documents, taken alone or in combination, explicitly discloses the claimed use or the claimed formulations. The achieved result is not obvious to a person skilled in the art. Thus, the cited documents only disclose the general state of the art, and are not considered to be of particular relevance.

Consequently, the invention claimed in claims 1-18 is considered to fulfil the requirements of novelty, inventive step, and industrial applicability.

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VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Chemical constitution, that is N- (phosphonomethyl) glycine, or formula does not support the wording "glyphosate" in claims 12 and 16. Confer PCT, Article 6 and the description page 1, line 31.